

Name: \_\_\_\_\_

### pa1030: Box multiplication of linear binomials (v9)

#### Example

Use the box method to multiply  $(6x + 3)$  and  $(2x + 4)$ .

*	6x	3	
2x	$12x^2$	6x	$12x^2 + 6x + 24x + 12$
4	24x	12	Combine like terms.
			$12x^2 + 30x + 12$

ANSWER:  $12x^2 + 30x + 12$

#### Question 1

Use the box method to multiply  $(4x + 6)$  and  $(7x + 9)$ .

*	4x	6	
7x	$28x^2$	42x	
9	36x	54	

ANSWER:  $28x^2 + 78x + 54$

### Question 2

Use the box method to multiply  $(9x - 4)$  and  $(8x + 5)$ .

*	9x	-4
8x	$72x^2$	$-32x$
5	$45x$	$-20$

ANSWER:  $72x^2 + 13x - 20$

### Question 3

Use the box method to multiply  $(6x - 3)$  and  $(9x + 8)$ .

*	6x	-3
9x	$54x^2$	$-27x$
8	$48x$	$-24$

ANSWER:  $54x^2 + 21x - 24$